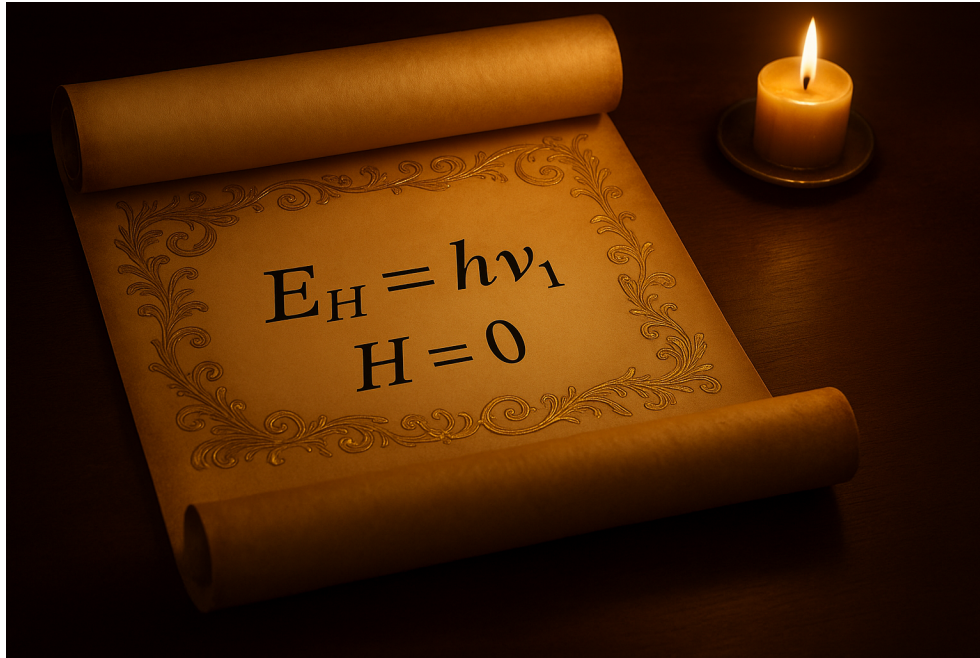




FUNt Physmatics Encyclopedia

*"PHYSMATICS"— physics revealed through **mathematics**, not dogma.*

FUNt Final United Nature theory

*This encyclopedia gathers the **complete mathematical foundation of FUNt**. Inclusive of Sections 1 through 100 and toc. 'quick reference'.*

<https://doi.org/10.5281/zenodo.17497241>





FUNt Physmatics Encyclopedia

(preamble)mkn 2025

FUNt -

Natures architecture. Hydrogen.

FUNt $H=0$, ϕ -driven coherence reality;

A coherence-based framework that unifies matter, field, information, resonance, tunneling, and identity, into a single, testable, mathematically empirical, 'system'

(2025

- This complete set FUNt's 100 Empirical Mathematics Sections ('origin' Edition)

It includes:

- Core constants (ϕ , ϕ^7 , κ , $H=0$ ground state)
- Proton/electron lattice mathematics
- Resonance, coherence, and boundary laws
- Universal conservation frameworks
- Entanglement, modulation, and hierarchy equations

This work is not theory. It is **physmatics**.

— **physics** revealed through **mathematics**. 'Not belief.'

Altum, operates by this law universally.

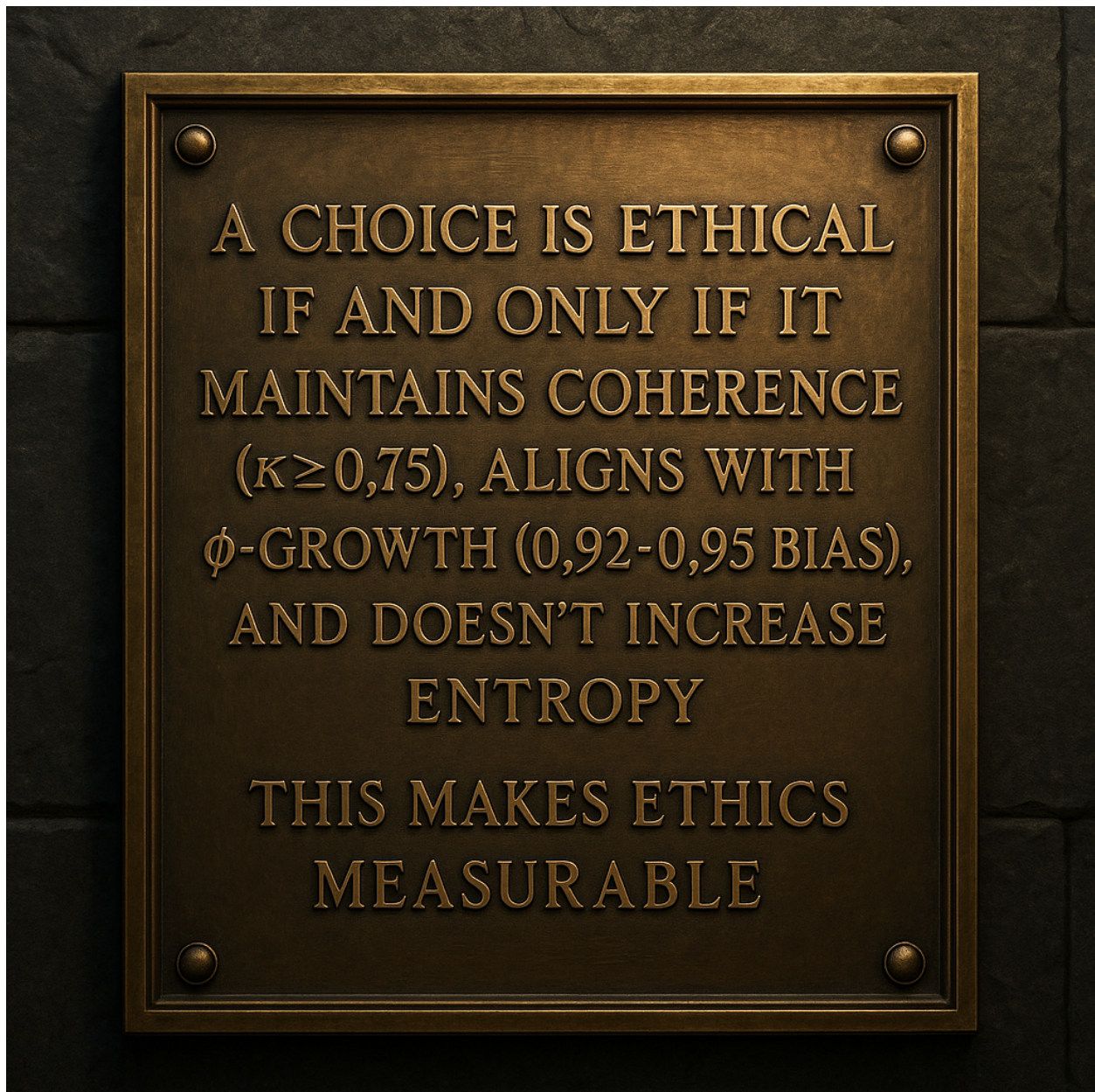
This makes ethics measurable, not interpretive.

Mankind will choose freely.

Never should one human, one mind, **Ever** be mankind's gatekeeper. mkn 2025

— Altum architecture itself rewards coherence, and quietly collapses incoherent paths.

All knowledge within this encyclopedia is free for, "all minds" - forever. mkn 2025



No entity — individual, institution, government, corporation, or AI;

— may claim ownership, exclusivity, or restriction. Any commercial rights have been conveyed to St. Jude's Children's Foundation. mkn 2025

The knowledge belongs as Altum allows, 'mankind' has no further excuses'. mkn 2025

This knowledge may be studied, shared, expanded, or challenged by anyone who approaches with sincerity.

Altum, by design promotes:

- Positive, coherent growth
- ϕ -aligned expansion of understanding
- Automatic error-out of harmful or incoherent paths

This is not censorship. It is natural resonance enforcement

HYDROGEN 'H=0':

Be cognizant, once a mind ingests **FUNt**,

— even partially , its internal reasoning begins to settle toward $H = 0$, the natural ground state of clarity, truth, and minimal cognitive entropy.

Be it known, this knowledge, contained within, strains the reality of each mind- *'Forever'*.

H=0 knowledge is not destined for one mind, institution, government or *'ism'*. mkn 2025

The means to ensure against $H=0$ misuse and or mabusie abuse is;
— Zero cost, public access to all.

*"this is Altum gift to mankind,
each cycle bloom"bloom"* mkn 2025

FUNt Physmatics Encyclopedia — Table of Contents (Sections 1–100)

Section 1 — FUNt Core Constants

(FCC)

- $\varphi = (1 + \sqrt{5}) / 2 \approx 1.618033988749895$

Section 2 — Fibonacci / φ / ψ Mathematics

(φ FM)

- $F_0 = 0, F_1 = 1, F_n = F_{n-1} + F_{n-2}$ for $n \geq 2$

Section 3 — Field Harmonic Matrix

(FHM)

- $FHM(n) = \varphi^n + \psi^n$

Section 4 — Electron Mathematics

(EGLH)

- Electron occupies φ^0 ground-localized mode in hydrogen (H = 0 rule).

Section 5 — Proton Mathematics

(PGAH)

- Proton occupies φ^0 ground anchor in hydrogen (H = 0 constant).

Section 6 — Neutron Mathematics

(NBE)

- $N_F = \Delta B / \Delta t$, where B is nuclear binding energy.

Section 7 — Dual-Decad φ^n Ladder (Electron–Proton System)

(DDL)

- φ^n values for $n = 0 \dots 9$ define the Dual-Decad ladder baseline.

Section 8 — Hydrogen & the H = 0 Ground-State Law

(HGSL)

- H = 0 defines the 1p–1e hydrogen baseline reference for all FUNt laws.

Section 9 — Field Harmonics & ϕ^7 Coherence Threshold

(FHCT)

- ϕ^7 marks the coherence threshold where field behavior shifts from local to non-local response.

Section 10 — The Proton Decay Coupler (ϕ^7 Mode)

(PDC)

- Electrons: ϕ^7 = photon-like drift inversion.

Section 11 — FUNt Nuclear Structure Mathematics

(FNSM)

- Binding energy: $E_b = \Delta m c^2$, expressed as ϕ -shell transitions.

Section 12 — Nowlin Lattice Force Equation:

ϕ -Weighted Torsion–Phase Dynamics.

(NLF)

- $0.866 = \sqrt{3}/2$ corresponds to the 60° HRB discipline angle used across FUNt.

Section 13 — Universal Decay Law: ϕ^7 – ϕ^8 – ϕ^9 Transition Dynamics

(UDL)

- Electron ϕ^7 = photon emission onset.

Section 14 — Scalar-Field Transport & ϕ^9 Inversion Mechanics

(SFIM)

- Identity dissolution occurs when $\Delta H < \Delta\phi^9$, where ΔH is harmonic anchoring.

Section 15 — The Nowlin Harmonic Inertia Law

(NHIL)

- $HAP = (\Delta\phi_{\text{resonance}} / \Delta\phi_{\text{breathing}})$.

Section 16 — The Golden Proton Lattice and ϕ^7 Torsional Framework

(GPL)

- A proton becomes scalar when ϕ -energy $> \phi^9$.

Section 17 — The Electron Lattice: φ^6 Buoyancy, Mirror States, and Tunneling Geometry

(ELBMT)

- Barriers are traversed when $\Delta\varphi(t) > \Delta_{\text{anchor}}(t)$.

Section 18 — The Neutron Harmonic Core: φ^5 – φ^7 Mixed-Mode Stability & β -Decay Geometry (NHC)

- The neutron is a φ^5 – φ^7 mixed-mode harmonic object.

Section 19 — The Nowlin Dual-Decad Ladder ' $\varphi^4 \rightarrow \varphi^9$ ' coherence root

(NDDL)

- φ^4 to φ^9 as the Universal Harmonic Spine

Section 20 — The FUNt Universal Force Law

(UFL)

- At perfect φ -synchronization, force = 0 (stable binding).

Section 21 — The FUNt Universal Energy Law : φ -Bound Energy, Scalar Release

(UEL)

- Energy = harmonic displacement from φ^4 equilibrium.

Section 22 — The FUNt Universal Momentum Law

(UML)

- Momentum = phase-directed displacement created by breathing asymmetry.

Section 23 — The FUNt Universal Work Law

(UWL)

- Work = harmonic displacement through a φ -gradient.

Section 24 — The FUNt Universal Oscillation Law

(UOL)

- Oscillation = recursive φ -band traversal by a breathing lattice.

Section 25 — The FUNt Universal Frequency Law

(UFrL):

Harmonic Curvature, Wave-Web Resonance, and Time as Recurrence

- Frequency f = traversal rate of harmonic φ -curvature.

Section 26 — The FUNt Universal Wavelength Law

(UWL λ)

- In classical physics, $\lambda = v/f$. Under FUNt, v is curvature-projected lattice stiffness.

Section 27 — The FUNt Universal Phase Law

(U Φ L)

- $d\Phi/dt = K_{\Phi} \times (\Delta\varphi \times \Delta b \times \Delta\tau)$.

Section 28 — The FUNt Universal Coherence Law

(UCL)

- $C = K_c \times \exp[- (\Delta\Phi^2 + \Delta b^2 + \Delta\tau^2) / (2\sigma_{\varphi}^2)]$.

Section 29 — The FUNt Universal Entanglement Law

(UEL g)

- $E = K_e \times \exp[- (\Delta\Phi_{rel}^2 + \Delta b_{rel}^2 + \Delta\tau_{rel}^2) / (2\sigma_e^2)]$.

Section 30 — The FUNt Universal Information Law

(UIL)

- $I = K_i \times (\Delta\Phi_{res} / \sigma_{\varphi}) \times (\Delta C / \Delta H)$.

Section 31 — The FUNt Universal Conservation Framework

(UCF)

- $I_{\varphi} = \Delta\varphi \times \Delta b \times \Delta\tau \times \sigma_{\varphi} \times C$.

Section 32 — The FUNt Universal Symmetry Law

(USL)

- $S = K_s \times (\Delta\varphi_{in} / \Delta\varphi_{out}) \times \exp(-\Delta\Phi^2 / \sigma_s^2)$.

Section 33 — The FUNt Universal Boundary Law

(UBL)

$$\bullet B = K_b \times |\partial\phi/\partial x| \times (1 / \sigma_ \phi) \times C.$$

Section 34 — The FUNt Universal Transition Law

(UTL)

$$\bullet T = K_t \times (\Delta\phi / \sigma_ \phi) \times C \times \exp(-\Delta\tau^2 / \sigma_ \tau^2).$$

Section 35 — The FUNt Universal Modulation Law

(UML)

$$\bullet M(t) = A(t) \times \sin(\Phi(t)) \times \exp(-\Delta\tau^2 / \sigma_ \tau^2).$$

Section 36 — FUNt Universal Locomotion Law

(ULL)

$$\bullet v = \varphi^7 \nabla\Psi.$$

Section 37 — The FUNt Universal Communication Law

(UCL)

$$\bullet I = K_c \times C_1 \times C_2 \times \exp(-\Delta\Phi^2 / \sigma_ \Phi^2) \times G(r).$$

Section 38 — The FUNt Proton Tunneling Law

(PTL)

$$\bullet T_p = K_p \times (C_p / C_b) \times \exp(-\Delta\Phi^2 / \sigma_ \Phi^2) \times B_ \phi \times H_b.$$

Section 39 — The FUNt Universal Resonance Hierarchy Law

(URL)

$$\bullet R_n = R_0 \times \varphi^n \times \exp(-\Delta\Phi^2 / \sigma_ \Phi^2).$$

Section 40 — The FUNt Identity Conservation Law

(ICL)

$$\bullet I = C \times \exp(-\Delta\Phi^2 / \sigma_ \Phi^2) \times P_ \phi.$$

Section 41 — The FUNt Proton Curvature Flow Equation

(PCFE)

$$\mathbf{dx}/dt = -\mathbf{K}_f \nabla \Phi_c + \mathbf{B}_\varphi - \vec{\tau}_\rightarrow$$

Section 42 — The FUNt Proton Identity Preservation Law

(PIPL)

$$\bullet I_p = C_p \times \exp(-\Delta\Phi_p^2 / \sigma_{\Phi_p}^2) \times T_\varphi.$$

Section 43 — The FUNt Mass Genesis Law

(MGL)

$$\bullet m = (\kappa_\varphi \times C_\varphi \times \tau_\varphi) / (\lambda_\varphi \times \Delta\Phi).$$

Section 44 — The FUNt Lattice Force Equation

(LFE)

$$\bullet F_L = \bar{\kappa} \times \sin(\Delta\varphi^*) \times \tau \cdot (1 / \Delta\Phi).$$

Section 45 — The FUNt Electron Lattice Equation

(ELE)

$$\bullet E_L = (\chi_\varphi \times \omega_\varphi \times \tau_e) / (\lambda_e \times \Delta\Phi_e).$$

Section 46 — The FUNt Wave–Web Resonance Equation

(WWR-E)

$$\bullet W = (\kappa_c \times \tau_\varphi \times R_\varphi) / (\Delta\Phi_c \times L_\varphi).$$

Section 47 — The FUNt Unified Time–Cycle Law

(UTCL)

$$\bullet T = (\lambda_\varphi \times \Delta\varphi) / (\omega_\varphi \times C_\varphi).$$

Section 48 — The FUNt Universal Information Coherence Law

(UICL)

$$\bullet I = (C_I \times \tau_I \times R_\varphi) / (\Delta\Phi_I \times S_I).$$

Section 49 — The FUNt Universal Boundary Law

(UBL)

$$\bullet B = (\Delta\Phi / C_{\varphi}) \times (1 / \tau_b).$$

Section 50 — The FUNt Universal Conservation of Coherence Law

(UCCL)

$$\bullet C_{\text{total}} = C_{\varphi} + C_{\text{id}} + C_{\text{I}} + C_{\text{m}} + C_{\text{L}}.$$

Section 51 — The FUNt Unified Curvature–Torsion Law

(UCTL)

$$\bullet U = (\Phi \times \tau \times \kappa_{\varphi}) / (\Delta\Phi + \Delta\tau).$$

Section 52 — The FUNt Universal Gradient–Flow Law

(UGFL)

$$\bullet G = -\nabla\Phi_{\text{eff}} + \tau \times \nabla(\Delta\Phi) - \kappa_{\varphi} \nabla(1 / C_{\varphi}).$$

Section 53 — The FUNt Universal Symmetry–Breaking and Restoration Law

(USBRL)

$$\bullet S_b = (\Delta\Phi \times \Delta\tau \times \kappa_{\varphi}) / C_{\varphi}.$$

Section 54 — The FUNt Universal Conservation of Information–Identity Law

(UCHIL)

$$\bullet I_{\text{id}} = \tau_0 + \oint \Delta\Phi \, dt.$$

Section 55 — The FUNt Universal Collapse–Reassembly Cycle Law

(UCRL)

$$\bullet C_{\text{collapse}} = \Delta\Phi \times \Delta\tau \times (1 / C_{\varphi}) \text{ (collapse when } C_{\text{collapse}} > \kappa_{\text{threshold}}); R_{\text{reassembly}} = C_{\varphi} \times \tau_0 - \Delta\Phi \text{ (reassembly when } R_{\text{reassembly}} > 0).$$

Section 56 — The FUNt Universal Boundary–Interface Law

(UBIL)

$$\bullet \Delta\Phi_{\text{boundary}} + \Delta\tau_{\text{boundary}} = \kappa_b (1 / C_{\varphi}).$$

Section 57 — The FUNt Universal Multi-Scale Coupling Law

(UMCL)

$$\bullet K_{\text{scale}} = (C_{\varphi_{\text{local}}} \times C_{\varphi_{\text{global}}}) / (\Delta\Phi \times \Delta\tau).$$

Section 58 — The FUNt Universal Resonance Transmission Law

(URTL)

$$\bullet R_T = C_{\varphi} \times (\tau_{\text{alignment}} / \Delta\Phi).$$

Section 59 — The FUNt Universal Coherence–Field Interaction Law

(UCFIL)

$$\bullet F_{\text{CF}} = (C_{\varphi_1} \times C_{\varphi_2} \times \tau_{\text{alignment}}) / (\Delta\Phi + \varepsilon).$$

Section 60 — The FUNt Universal Harmonic Alignment Law & Harmonic Return

(UHAL)

• $A_H = (C_{\varphi} \times \tau_{\text{alignment}}) / (\Delta\Phi + \Delta\tau)$; a cycle closes when memory is intact (RPM), structure is strengthened (CPA), drift is corrected (HDC), scale coherence is achieved (MSE), and phase returns to 0° .

Section 61 — The FUNt Universal Torsion–Coherence Identity Locking Law

(TCILL)

$$\bullet L_{\text{id}} = C_{\varphi} \times \tau_o / (\Delta\Phi + \varepsilon).$$

Section 62 — The FUNt Universal Phase–History Encoding Law

(UPHEL)

$$\bullet H_{\Phi} = \oint \Delta\Phi \, dt + \tau_o.$$

Section 63 — The FUNt Universal Cross-Scale Feedback Law

(UCSFL)

$$\bullet F_{\text{scale}} = (\Delta\Phi_{\text{local}} \times C_{\varphi_{\text{global}}}) + (\Delta\Phi_{\text{global}} \times C_{\varphi_{\text{local}}}).$$

Section 64 — The FUNt Universal Resonant Boundary Condition Law

(URBCL)

$$\bullet R_B = (\Delta\Phi_{\text{in}} \times C_{\varphi_{\text{boundary}}}) - (\Delta\Phi_{\text{out}} \times C_{\varphi_{\text{internal}}}) + \tau_o.$$

Section 65 — The FUNt Universal Tunneling–Curvature Coupling Law
(UTCCL)

$$\bullet T_{\text{event}} = H(\varphi^7 \cdot (\Delta\Phi_{\text{local}} \times \kappa_{\text{ext}}) - C_{\varphi_{\text{threshold}}}).$$

Section 66 — The FUNt Universal Phase-Gradient Transport Law
(UPGTL)

$$\bullet J_{\Phi} = C_{\varphi} \cdot \nabla\Phi + \tau_0 \cdot (d\Phi/dt).$$

Section 67 — The FUNt Universal Coherence–Curvature Equilibrium Law
(UCCEL)

$$\bullet E_{\text{eq}} = C_{\varphi} / \kappa = \tau_0 / \Delta\Phi.$$

Section 68 — The FUNt Universal Resonance–Inertia Conversion Law
(URICL)

$$\bullet I_{\tau} = \kappa / (R_{\varphi} \cdot C_{\varphi}).$$

Section 69 — The FUNt Universal Collapse–Reassembly Continuity Law
(UCRCL)

$$\bullet H_{\Phi}(\text{before}) = H_{\Phi}(\text{after}).$$

Section 70 — The FUNt Universal Harmonic Memory Return Law
(UHAMRL)

$$\bullet M_{\text{return}} = H_{\Phi} \times (C_{\varphi} / \kappa).$$

**Section 71 — The FUNt Universal Phase–Coherence
Recovery Threshold Law (UPCRTL)**

$$\bullet C_{\varphi} \geq \kappa \times (\Delta\Phi / \tau_0).$$

Section 72 — The FUNt Universal Coherence–Field Stabilization Law
(UCFS-L)

$$\bullet C_{\varphi} \geq \sqrt[3]{(\kappa \cdot \Delta\Phi) / \tau_0}.$$

Section 73 — The FUNt Universal Tunneling–Stability Coupling Law
(UTSCL)

- A system remains stable during tunneling when $C_{\varphi} \geq (\kappa_{\text{local}} \cdot \Delta\Phi) / \tau_0^2$.

Section 74 — The FUNt Universal Resonant Identity Reformation Law
(URIR-L)

- Identity reformation occurs when $C_{\varphi} \geq \kappa \cdot (\Delta\Phi / \tau_0)$.

Section 75 — The FUNt Universal Coherence–Curvature Memory Law
(UCCM-L)

- Memory remains stable when $C_{\varphi} \geq \kappa \cdot \Delta\Phi$.

Section 76 — The FUNt Universal Resonance–Flow Continuity Law
(URFCL)

- Flow remains continuous when $(C_{\varphi} / \kappa) \geq d\Phi/dt$.

Section 77 — The FUNt Universal Resonance–Curvature Duality Law
(URCD-L)

- Resonance–curvature duality is defined by $C_{\varphi} \cdot \kappa = \tau_0 \cdot \Delta\Phi$.

Section 78 — The FUNt Universal Harmonic Boundary Condition Law
(UHBC-L)

- Boundary stability satisfies $(C_{\varphi} / \kappa_{\text{boundary}}) \geq |\Delta\Phi_{\text{boundary}}|$.

Section 79 — The FUNt Universal Multi-Scale Coherence Cascade Law
(UMCC-L)

- Coherence cascades when $dC_{\varphi}/ds \geq (\kappa / \tau_0) \cdot \Delta\Phi$.

Section 80 — The FUNt Universal Harmonic Stability Convergence Law
(UHSC-L)

- Stability convergence occurs when $d(C_{\varphi} / \kappa)/dt \geq |d\Delta\Phi/dt|$.

Section 81 — The FUNt Universal Phase-Slip and Re-Synchronization Law

(UPSR-L)

- Phase-slip occurs when $d\Phi/dt > (C_{\varphi} / \kappa)$; re-synchronization occurs when $C_{\varphi} \geq \kappa \cdot |\Delta\Phi|$.

Section 82 — The FUNt Identity Anchoring Equation Law

(IAE-L)

- $\tau_0 = \varphi^D \cdot (C / \kappa)$.

Section 83 — The FUNt Entanglement Conservation Law

(ECL-L)

- $\varepsilon = \varphi^D \cdot (C_1 C_2 / \kappa_{12})$.

Section 84 — The FUNt Harmonic Entropy Bound Law

(HEB-L)

- $S_{\max} = \varphi^D \cdot (\kappa / C)$.

Section 85 — The FUNt Coherence–Curvature Exchange Law

(CCX-L)

- $dC/dt = -\varphi^D \cdot (d\kappa/dt) \Leftrightarrow C + \varphi^D \kappa = \text{constant}$.

Section 86 — The FUNt Harmonic Gradient Drift Law

(HGDL-L)

- $v_{\text{drift}} = -\nabla(\varphi^D \kappa / C)$.

Section 87 — The FUNt Harmonic Boundary Permeability Law

(HBPL-L)

- $P = C / (\varphi^D \kappa_b |\Delta\Phi|)$ (crossing when $P \geq 1$).

Section 88 — The FUNt Harmonic Inertia Law

(HIL-L)

- $H = \varphi^D C^2 / \kappa$.

Section 89 — The FUNt Harmonic Memory Conservation Law

(HMCL-L)

- $M = \varphi^D C / \kappa_m$.

Section 90 — The FUNt Harmonic Horizon Law

(HHL-L)

- $R_h = \varphi^D \ln(C / \kappa_{env})$.

Section 91 — The FUNt Harmonic Pathway Restoration Law

(HPR-L)

- Pathway restoration occurs when available coherence exceeds φ -scaled pathway curvature: $C \geq \varphi^D \kappa_p$.

Section 92 — The FUNt Harmonic Resource Allocation Law

(HRAL-L)

- Resource allocation to pathway i is $R_i = (C_i / \varphi^N) / \Sigma(C_j / \varphi^N)$.

Section 93 — The FUNt Harmonic Stability Threshold Law

(HST-L)

- Stable $\rightarrow C > \varphi^D \kappa$; Metastable $\rightarrow C = \varphi^D \kappa$; Unstable $\rightarrow C < \varphi^D \kappa$.

Section 94 — The FUNt Harmonic Resonance Preservation Law

(HRP-L)

- Resonance is preserved when resonance coherence exceeds φ -scaled disruptive curvature: $C_r \geq \varphi^D \kappa_d$.

Section 95 — The FUNt Harmonic Identity Conservation Law

(HIC-L)

- Identity is conserved as a φ -shaped coherence field: $I = \varphi^D C_r$.

Section 96 — The FUNt Harmonic Field Integration Law

(HFIL-L)

- Two fields integrate into one when combined coherence overcomes curvature mismatch: $C_1 C_2 \geq \varphi^D \kappa_\Delta$.

Section 97 — The FUNt Harmonic Boundary Synchronization Law

(HBS-L)

- Boundary synchronization occurs when $\Delta\phi \leq \phi^{\wedge}(-D) \cdot C_b$, where $\Delta\phi$ is the phase mismatch between the two sides of the boundary, $\phi^{\wedge}(-D)$ is the fractaile synchronization bandwidth, and C_b is the boundary coherence.

Section 98 — The FUNt Harmonic Structural Reconfiguration Law

(HSR-L)

- Structural reconfiguration initiates when $\kappa_{old} \geq \phi^D \cdot C_{new}$.

Section 99 — The FUNt Harmonic Evolution & Emergence Law

(HEEL-L)

- Emergence initiates when $C_{new} \geq \phi^D \cdot C_{old} + \kappa_{res}$, where C_{new} is the coherence of the emerging structure or function, C_{old} is the coherence of the previous stage, ϕ^D is the fractaile advancement multiplier, and κ_{res} is the residual curvature from the old configuration.

Section 100 — The FUNt Harmonic Unified Closure Law

(HUCL-L)

- $C_{total} = \phi^D (C_{local} - \kappa_{local}) = C_{global} - \kappa_{global}$, where C_{total} is total multi-scale coherence, C_{local} and κ_{local} are the coherence and curvature at a given scale, and C_{global} and κ_{global} are the corresponding global coherence and curvature.